

What is claimed is:

1. A device comprising a plurality of substrates mounted vertically in a stacked structure, each 5 substrate having active components emitting light of a given wavelength through the stacked structure towards a viewing surface.
2. The device of claim 1 wherein the substrate 10 comprises a thickness of less than 0.5 mm.
3. The device of claim 1 wherein the substrate material comprises glass or plastic.
- 15 4. The device of claim 1 wherein said plurality of substrates are mounted in an order whereby light with the shortest wavelength is emitted closest to the viewing surface.
- 20 5. The device of claim 4 wherein the active components are distributed on a surface of each substrate.
6. The device of claim 5 wherein the surface of each substrate is punctured and staggered.

7. The device of claim 1 wherein the active components are distributed on a surface of each substrate.

8. The device of claim 7 wherein the active components  
5 comprise one or more organic layers sandwiched between first and second conductive layers.

9. The device of claim 8 wherein the organic layers on said plurality of substrates comprise a non-overlapping  
10 pattern to allow a clear optical path for the emitted light.

10. The device of claim 9 wherein the pattern of the organic layers comprises strips.

15

11. The device of claim 8 wherein the thickness of each of the first and second conductive layers is about 0.02 - 1  $\mu\text{m}$ .

20 12. The device of claim 8 wherein the first conductive layer comprises an opaque material.

13. The device of claim 12 wherein the first conductive layer comprises a metallic material.

14. The device of claim 12 wherein the first conductive layers on said plurality of substrates comprise a non-overlapping pattern to allow a clear optical path for the emitted light.

5

15. The device of claim 14 wherein the pattern of the first conductive layers comprises strips.

16. The device of claim 14 wherein the organic layers  
10 on said plurality of substrates comprise a non-overlapping pattern to allow a clear optical path for the emitted light.

17. The device of claim 16 wherein the pattern of the  
15 organic layers comprises strips.

18. The device of claim 1 wherein the active components are distributed on a first surface and a second surface of each substrate.

20

19. The device of claim 18 wherein the active components comprise one or more organic layers sandwiched between first and second conductive layers.

1000518652-071150026

20. The device of claim 19 wherein the organic layers  
on said plurality of substrates comprise a non-  
overlapping pattern to allow a clear optical path for  
the emitted light.

5

21. The device of claim 19 wherein the first conductive  
layer comprises an opaque material.

22. The device of claim 21 wherein the first conductive  
10 layers on said plurality of substrates comprise a non-  
overlapping pattern to allow a clear optical path for  
the emitted light.

23. The device of claim 22 wherein the organic layers  
15 on said plurality of substrates comprise a non-  
overlapping pattern to allow a clear optical path for  
the emitted light.

202543865702